

Title (en)
ACCURATE DOSING PUMP AND ACCESSORIES THEREFOR

Title (de)
PRÄZISIONSDOSIERPUMPE UND ZUBEHÖR DAFÜR

Title (fr)
POMPE POUR DOSAGE PRECIS ET SES ACCESSOIRES

Publication
EP 1385779 B2 20200624 (EN)

Application
EP 02706431 A 20020221

Priority
• US 0205864 W 20020221
• US 27033001 P 20010221

Abstract (en)
[origin: WO02068317A1] With the subject invention, a pump (100) may be formed that generally includes a reservoir (112) formed to accommodate at least one fluid dose, and a fluid-collecting chamber (114) in communication with the reservoir. The fluid-collecting chamber is located such that fluid from the reservoir is fed thereinto, preferably gravitationally. A piston (126) is disposed to reversibly slide within at least a dose-control portion (118) of the fluid-collecting chamber, and the piston is configured such that upon sliding within the dose-control portion, the piston seals or substantially seals the dose-control portion from other portions of the fluid collecting chamber. The piston is configured to displace a volume of fluid from the sealed or substantially sealed dose-control portion which is approximately equal to or greater than the volume of one of the doses of the pump.

IPC 8 full level
B05B 11/00 (2006.01); **B67D 7/60** (2010.01); **A61F 9/00** (2006.01); **F04B 9/14** (2006.01); **G01F 11/02** (2006.01)

CPC (source: EP US)
A61F 9/0008 (2013.01 - EP US); **B05B 11/0044** (2018.07 - EP US); **B05B 11/1011** (2023.01 - EP US); **B05B 11/1015** (2023.01 - EP US); **B05B 11/1056** (2023.01 - EP US); **B05B 11/107** (2023.01 - EP US); **B05B 11/1074** (2023.01 - EP US); **B05B 11/1077** (2023.01 - EP US); **F04B 9/14** (2013.01 - EP US); **G01F 11/025** (2013.01 - EP US); **B05B 11/1057** (2023.01 - EP US)

Citation (opposition)
Opponent :
• WO 9220460 A1 19921126 - PENN LAURENCE RICHARD [GB]
• US 4150146 A 19790417 - EISENBRAND GERHARD
• GB 1579806 A 19801126 - HEDRICH VAKUUMANLAGEN WILHELM
• DE 10017438 A1 20011011 - KATZ OTTO [DE]
• US 4726747 A 19880223 - SKORKA THOMAS [DE]
• DE 19610456 A1 19970918 - PFEIFFER ERICH GMBH & CO KG [DE]
• US 4623337 A 19861118 - MAURICE DAVID M [US]

Cited by
EP1709945A1

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)
WO 02068317 A1 20020906; AT E420837 T1 20090115; DE 60230863 D1 20090305; EP 1385779 A1 20040204; EP 1385779 A4 20070516; EP 1385779 B1 20090114; EP 1385779 B2 20200624; US 2004129734 A1 20040708; US 7261224 B2 20070828

DOCDB simple family (application)
US 0205864 W 20020221; AT 02706431 T 20020221; DE 60230863 T 20020221; EP 02706431 A 20020221; US 46790404 A 20040202